

THE GLOBE AND MAIL

SE Report on Business
HD **Why fake meat risks being spoiled**
BY By Ann Hui
CR Staff
WC 3,033 words
PD 28 May 2022
SN The Globe and Mail
SC GLOB
ED Ontario
PG B1
LA English
CY ©2022 The Globe and Mail Inc. All Rights Reserved.

LP

Once seen as the future of protein, simulated meat products have run up against a formidable tide of problems that has the industry rethinking expectations. Ann Hui explains

Late last year, Michael McCain was on a webcast with Maple Leaf Foods Inc. shareholders, delivering the previous quarter's financial results. The news wasn't great.

TD

The company's meat-protein business had performed well – revenue had grown by 13 per cent. But growth in the plant-protein division “had evaporated,” he said. Sales were down by 6 per cent, instead of projected growth of 30 per cent.

After several years of proselytizing about “meat” made from plants – doubling down on the business, then doubling down again – Mr. McCain now said Maple Leaf would “reassess” its investment.

It was a remarkable shift.

More than any other Canadian company, Maple Leaf – and Mr. McCain in particular – had for years been adamant about their belief in plantbased protein. To hear the company's long-time chief executive describe it, the investment was more than just a business decision. It was the future of food and a key part of Maple Leaf's longterm plan. The company had long touted its goal of being the world's most sustainable protein company and had made huge strides in that direction. Sustainability, Mr. McCain insisted, was an ethical and moral imperative.

It was an unusual message for a meat company.

Meat production – which accounted for more than 96 per cent of Maple Leaf's \$4.5-billion in revenue last year – is to blame for as much as one-third of human-caused greenhouse gases. Beef, in particular, requires an extraordinary amount of land and water to produce, and releases high levels of methane, a greenhouse gas that's 28 times more potent than carbon dioxide.

And over the past six decades, global meat production has quadrupled. At current consumption rates, and with a rapidly growing global population projected to reach almost 10 billion by 2050, the meat business is unsustainable.

Not too long ago, plant-based proteins and other “meat analogues” seemed like an ideal solution to both feed an exploding population and avoid the worst effects of climate change. They were touted by Mr. McCain and others as a perfect compromise between sustainability and our continuing love for meat (or at least meat-like products). Maple Leaf spent US\$260-million acquiring various “meat from plant” brands and promised to spend another US\$310-million to build a huge plant-based-protein facility in Indiana.

Other huge companies jumped into the market, including Cargill, Tyson and JBS. Bill Gates, Li KaShing and other big-name investors poured in billions, too. Impossible Foods – whose slogan is “Eat meat, save the planet” – has raised US\$2.1-billion in funding since its founding in 2011. When Beyond Meat went public in May, 2019, it was valued at US\$3.7-billion; within months, its shares had increased ten-fold. Fast-food chains such as McDonald’s, KFC, Taco Bell and A&W raced to partner with alternative-meat companies.

It wasn’t just investors who were hyped. Impossible, whose soy-based burger includes an ingredient that “bleeds” like rare beef, won a 2019 United Nations Global Climate Action Award. Its biochemist CEO, Patrick Brown, claimed the company’s product was a step toward solving everything from global food insecurity to climate change, and even geopolitical conflict, by reducing fighting over water and land. “Meat” from plants, Impossible boasted, was a win-win-win.

But by 2021, the “future of food” had failed to deliver on its own hype. In Canada, which saw a 34-per-cent jump in plant-based sales in 2020, growth slowed to 7 per cent. In the United States, sales growth plunged from 46 per cent to zero. At Maple Leaf, annual sales dropped by 4.7 per cent, spurring the company’s “reassessment.”

When asked what went wrong during a video interview in mid-May, six months after that shareholder call, Mr. McCain pauses.

“We did that deep dive basically to understand the question: Why?” There was no single answer, either, he says. And the plant-based market is far from dead. The Swiss bank UBS projects sales to rise to US\$51-billion by 2025, a three-fold increase from 2019. Impossible Foods has maintained exceptional growth, reporting an 85-per-cent jump in revenue in the fourth quarter of 2021.

But as with any hugely hyped new product, it’s going through some growing pains, both with consumers and investors.

Until the question on plant-based protein, Mr. McCain had looked lighter than he had in a long while. Just weeks earlier, he’d announced he was stepping down as CEO after 27 years and taking on the role of executive chairman, where he’ll spend more time steering the company’s sustainability agenda.

He was silent for a few moments before summing up the company’s deep dive – and what they’d heard from customers – in two words: “Expensive novelty.”

At the start of 2020, Beyond Meat was facing what seemed like a promising year.

Despite a rocky 2019, the U.S.-based company best known for its pea-based “beef” had just announced a new agreement with its pea-protein supplier that would significantly increase its production capabilities. And it had big expansion plans in the works, including new partnerships with Subway and Denny’s.

Then came the pandemic.

The company, which had relied heavily on deals with major restaurant chains (including A&W in Canada) suddenly had to shift gears. With lockdowns spreading, Beyond Meat found itself scrambling to divert finished products away from restaurants and onto retail shelves.

In a call with investors, Beyond Meat officials described how they rushed to retrieve products out of storage, transport them back to their manufacturing plants and repackage them for retail.

They also had to dispose of the old packaging. All of this cost US\$6-million. To further complicate matters, they ran out of the paper and plastic in which they sold their faux beef, which was in short supply.

A similar story unfolded across the industry.

For plant-based food companies big and small, the pandemic created a myriad of challenges: lockdowns, restaurant closings, labour disruptions and supply shortages. Worldwide logistics snarls meant major food-ingredient companies and distributors couldn't keep up with orders.

"If you can imagine," Mr. McCain told investors in a separate shareholder call, "trying to operate a business with a third of your people missing one day, half of your ingredient supply not showing up the next and suppliers jacking the price by 15 per cent of another set of ingredients the next day, all repeating itself over and over and over."

Enhanced sanitization, distancing protocols and other workplace safety measures at the food-manufacturing facilities themselves contributed to massive backlogs and shortages. Installing safety features at Maple Leaf's many facilities – both meat and plant-based – including separation measures, screening areas and protective equipment, cost the company tens of millions of dollars, Mr. McCain said.

Exacerbating matters was the severe drought last year across the Prairies, which threatened access to some of the most important ingredients for many plant-based products: peas and pulses. Canada reported a 45-per-cent drop in yellow-pea production for the year – a common ingredient in many plant-based meats.

Some companies, including Beyond Meat, weren't able to regain their footing – they've continued to deal with widespread product and shipping delays. The company reported a net loss of US\$182million in 2021.

Such startups were particularly vulnerable because of their position "as an emerging industry that is largely not operating at scale or with the purchasing power of more developed categories," according to a report from Good Food Institute, which promotes meat alternatives.

For Kamila Chatila-Amos and Jane Ong, the founders of the Montreal-based Neophyto Foods, the pandemic pushed them into a whole new business.

They'd launched just months earlier as a vegan cheese company, selling direct to restaurants, all of which had suddenly shut down. If they wanted to shift to direct-to-consumer sales, cheese wouldn't work. The product had to be shelf stable so they could ship it by regular mail.

So Neophyto relaunched as a purveyor of dehydrated plant-based ground beef made from a mix of soy and pea protein. Customers would rehydrate the mixture in their own kitchen by adding oil and water.

Since then, it's been an uphill battle. The startup began selling its product online, then moved to grocery stores – but only briefly. "A big thing we realized is that it's expensive to be in retail stores," Mr. Chatila-Amos says.

As restaurants began opening up again, they've slowly built their client base there, too.

"It's very old-school – it's cold-calling," he says.

After many months and hundreds of calls, he says, they've landed a "couple tens" of restaurant clients.

In an increasingly crowded, competitive market, startups like Neophyto are at a disadvantage on almost every measure, especially compared with the big players: manufacturing capabilities, marketing and the deep pockets that allow larger competitors to absorb huge losses on a product with low margins.

"Five years ago, I'd have said this was a new industry," Mr. Chatila-Amos says. "Whereas now it's absolutely dominated by the big players in the meat and dairy industry."

Indeed, smaller startups around the world have been snapped up by giants such as JBS, Tyson, WH Group and Maple Leaf.

Others – those that don't have the backing of large investors – either struggle to gain traction or simply fizzle out.

The entire episode shows all the classic signs of a product life cycle topping out, according to Kevin Grier, a livestock industry analyst. "And if I'm right about where we're at," he says, "then all of [the remaining players] are going to have to fight for the pie that's no longer exploding."

He predicts the market will continue to soften, leading to further consolidation, price-cutting and tough competition.

But this consolidation in the hands of Big Meat is spurring a growing debate. For many, the solution to climate change requires deep, systemic transformation of the food system – not just what companies are producing, but how they're produced and by whom.

Last month, the International Panel of Experts on Sustainable Food Systems, an independent group comprised of scientists, economists and others involved in food-system research, released a report subtitled Fake Meat Will Not Save the Planet.

The report argues that many of the companies now acquiring plant-based brands are the same ones responsible for the harmful practices now deeply entrenched in the food system – environmental degradation, exploitative labour systems, agricultural monocultures and other unsustainable practices.

"These firms got to be extremely large and extremely powerful by doing whatever it takes to be large and powerful," says the report's lead author, Phil Howard, a professor of food and community sustainability at Michigan State University.

In particular, the report takes aim at the claim that plant-based proteins are the silver bullet to fixing the food system.

One of the most widely discussed criticisms are the purported health benefits. Many meat-from-plants products contain high levels of sodium and saturated fat, and fall under the category of "ultraprocessed," which Canada's Food Guide – and nutritionists across the board – warn consumers to limit their intake of.

They also reinforce "centre-of-the-plate dietary patterns," says Prof. Howard – simply replacing meat with meat substitutes, as opposed to diversifying the entire diet.

The report also questions the sustainability claims of some plant-based-protein companies.

Impossible Burger, for instance, claims its patty requires 87 per cent less water and 96 per cent less land, and produces 89 per cent fewer greenhouse gases than conventional beef.

But the vast majority of existing research on such claims, the IPES report says, comes from the companies themselves, making them difficult to substantiate. The independent research that does exist, meanwhile, shows a high degree of variability, dependent largely on the kind of alternative protein used (soy and wheat, for instance, have a much larger environmental impact than lupin, a bean that's growing in popularity among vegans) and where it comes from. Coconut, for one – used

by both Beyond Meat and Maple Leaf – is associated with deforestation.

Most importantly, says Prof. Howard, plant-based companies typically compare their products with the worst offenders – namely, industrial beef producers. This fails to take into account the fact that other methods of meat production can have a much smaller environmental footprint, he says. Poultry production, for example, generates a fraction of the GHG emissions of beef. And smaller-scale operations tend to have smaller footprints than industrial-scale ones.

Mr. Chatila-Amos, for his part, admits plant-based foods might not be a silver bullet for climate change, but he's quick to add, "They're a part of a solution."

Small actions, he says, can result in big changes.

But big changes are needed, too – not just from major producers, but also governments and policy makers.

"It comes with harder systemic change to our greater economy, our industry and as a country," he says. "You can't ask people individually to stop climate change."

Paul Uys, a former member of the IPES panel who spent more than four decades in the food industry, including 25 years leading product development at Loblaw, echoes this.

"There isn't one silver bullet, unfortunately. The broader silver bullet is: How do we get a more diverse, sustainable food-production system?" Mr. Uys says. Instead of focusing on one product or solution, he says, real change will require many steps, at every level.

For that matter, Mr. Uys adds, separate solutions will be required to address the very different challenges faced by different regions – between developing and developed countries, and the global north and south.

"We need machine guns with many silver bullets."

Back at Maple Leaf, Mr. McCain breaks down the findings of the company's reassessment. He's careful to specify the analysis refers to the entire category, not just Maple Leaf's products.

The results weren't encouraging – at least in the short term.

At first, he says, plant-based products enjoyed what he calls a "hyperactive level of trial," induced in part by social-media buzz. "That trial failed to convert consumers to repeat buyers," Mr. McCain says. "High level of trial, very low levels of repeat behaviour."

There were many reasons for this.

The first, and one of the most problematic, was cost. Even with meat prices on the rise – the cost of meat spiked by almost 10 per cent from 2020 to 2021 – the most popular plant-based beef substitutes typically sell for double the price of the real thing, or about \$3.50 per 100 grams compared with \$1.50. And at a time when food inflation is at an all-time high, price is, for many families, the only factor. (Impossible Foods, for one, has made several efforts in the past year to reduce prices, saying it will continue to do so until it undercuts meat.)

Another reason was that many customers just didn't like the products very much. "They didn't feel the taste experience was satisfactory," says Mr. McCain, adding this was particularly apparent when it came to choosing foods the whole family could enjoy.

Sylvain Charlebois, director of the Agri-Food Analytics Lab at Dalhousie University, agrees. "At the very beginning of the plant-based hype, there were a lot of products that were launched that weren't very good," he says. "I think it really impacted how consumers saw the category."

There was also, Mr. McCain said, "the realization that sustainability – while important to most of us – was not a purchase motivator."

So Maple Leaf is going back to the drawing board and adjusting its business model once again.

"With a moderated, contracted projection of the market size," says Mr. McCain, "we have to and are in the process of adjusting our investment rate."

That \$310-million plant the company had planned to build in Indiana will be dramatically scaled down and focus solely on producing tempeh.

All other products will be produced in the existing supply chain or at Maple Leaf meat plants.

Does Mr. McCain still believe in meat from plants? He says yes, but with dialled-back expectations for steady but moderate growth.

In the meantime, his mission remains pushing the importance of sustainability as a motivator for Maple Leaf and its 13,000-plus employees – a way to feel purposeful.

He reflects on a lecture he delivered to business students last year, when he was asked whether the meat industry could ever truly be sustainable.

"That's the existential question," he told the class.

"Does our industry have a right to exist?" "It's a normal, human question that we ask ourselves," he says now. "Why do we do what we do?" Ultimately, Maple Leaf is a meat company and will be for the foreseeable future, until plant-based proteins truly start to live up to their potential. And so the problem of sustainability in the meat industry, says Mr. McCain, must be addressed.

"That's what we're working on," he says. He's excited about the potential for technologies such as anaerobic digestion, which converts manure into renewable energy, and regenerative agriculture – farming practices designed to draw carbon out of the atmosphere and rebuild organic matter in soil.

He hopes to see a future where the company is not only carbon-neutral – a milestone Maple Leaf hit three years ago – but carbon-negative.

The push into plant-based, he says, was aligned with that sustainability goal. But he says it's only a small part of Maple Leaf's larger vision.

"We weren't in that business to further our sustainability agenda," he says. "It was aligned with our objectives."

"But it was a business decision."

CO cpac : Maple Leaf Foods Inc

IN i41 : Food/Beverages | icnp : Consumer Goods | ifood : Food Products

NS c15 : Financial Performance | c151 : Earnings | gclimt : Climate Change | ccat : Corporate/Industrial News | gcat : Political/General News | genv : Natural Environment | gglobe : Global/World Issues | ncat : Content Types | nfact : Factiva Filters | nfcpin : C&E Industry News Filter

RE cana : Canada | namz : North America

PUB The Globe and Mail Inc.

AN Document GLOB000020220528ei5s00027

Search Summary

Text	"climate action"
Date	20220331 to 20231231
Source	The Globe and Mail - All sources
Author	All Authors
Company	All Companies
Subject	All Subjects
Industry	All Industries
Region	All Regions
Language	English
Results Found	334
Timestamp	26 November 2023 6:26 PM